# ST. CROIX TRAIL COUNTY STATE-AID HIGHWAY 21





Washington County, Minnesota

1998-1999

Project Type: Rural, 2-lane

#### **PURPOSE**

To reconstruct the segment of highway in Washington County that had the most accidents of any road in the county and to replace an old, narrow bridge, that has one of the lowest structural ratings in the Twin Cities, with a new bridge sensitive to an adjacent park.

## **DESCRIPTION**

The road, designated a Natural Preservation Route, is parallel to a National Wild and Scenic River and crosses through an edge of Afton State Park. From Afton, the road winds south through a coulee formed by a rushing stream running parallel to the road. It climbs out of the coulee onto rolling farm land before descending again into a valley formed by Trout Brook. It takes a sharp turn at Dodges Corner before rising out of the valley back to rolling farm country. This is a favorite scenic route near the Twin Cities that gets considerable traffic.

#### PUBLIC ENGAGEMENT

The County invited the City of Afton and Denmark Township to partner with them in developing the project. Both municipalities agreed to do so. Public Advisory Committee (PAC) meetings were held, with locations alternating between the City and the township. The Consulting Landscape Architect had been designated the Project Manager. In addition to PAC meetings, public information meetings, a public hearing, and meetings with the Afton City Council and the Denmark Township Board, the Project Manager held several one-on-one meetings on the project site. On site meetings with regulatory authorities, state and national park officials, and with the leader of those people who had previously opposed the project were extremely useful in establishing a dialogue and a clear understanding of issues. Opponents of the project were purposefully asked to join the PAC and considerable attention was given to their issues.

# CONTEXT SENSITIVE SOLUTIONS APPROACH

The most critical aspect of the project was for the county to coordinate its vision of the highway with the visions of all of the government agencies that also had jurisdiction in the project corridor, especially the municipalities, the Minnesota





Department of Natural Resources (Divisions of Parks and Recreation and the Division of Waters), the National Park Service, the Minnesota-Wisconsin Boundary Area Commission, and the Army Corps of Engineers.



The County also set the tone for public involvement when the Project Manager, on the first meeting of the Public Advisory Committee, explained the purpose and scope of the project. He explained that it was the responsibility of the county to provide safe and efficient transportation to all people using its highways. He also showed that the highway and the bridge were inherently unsafe and that their design had contributed directly to more accidents than anywhere else in the county. The county had a responsibility to fix the road and it was going to fix it. What the PAC was asked to do was to help the county determine how it was going to be fixed.



The PAC defined the issues and established the goals for the project. It also critiqued alternative solutions (illustrated by computer simulations) developed by the design team and finally selected a preferred alternative. Although not all members of the committee supported the preferred alternative, they did consent to its construction by abstaining to vote either for or against the project. Those people who objected to the project were in such a minority that they recognized that although they objected to road-building in principle, they would not object to improving public safety that the overwhelming majority of their neighbors supported.

One particular effective CSS method was to stake the proposed alignment with construction limits and to meet with those opposed to the project on site, walking the alignment, and adjusting construction limits where practical. During construction, a fence defining the construction limits was installed. Specifications required that equipment could not be parked under trees where roots could be damaged.

#### OUTCOME

At the end of a four-month public engagement process, the PAC supported the plan to improve the road and the bridge. The road was designed to a 45 mph design speed, minimizing the taking of state park land. Geotextile was used to protect a steep natural slope, thus minimizing grading and the clearing of roadside vegetation. The county compensated the Department of Natural Resources (DNR) by purchasing more valuable land for another state park. The bridge was designed to improve fisheries in accordance with DNR best practices and its aesthetic treatments mimicked the rustic architecture found in the nearby state park. The width of the shoulder on the road and bridge was designed to accommodate bicycle traffic.

#### **CHALLENGES**

The county had attempted to improve this road ten years earlier. Using a more traditional approach, the county had designed the roadway and bridge, discussed the implications with State Park officials and announced their decision at a public hearing.

The initial proposed road had been designed as a high-speed facility, cutting through the park on a straight line. A standard bridge crossed the creek. There







had been only minimal public involvement prior to the public hearing. At the hearing, the design consultant explained that the straight flat road was the only way that the county could construct the project and still meet stateaid requirements. Also at the hearing, which was held as part of a County Board Meeting, an estimated fifty children attended, most dressed as trees and a few dressed as lumberjacks. The lumberjacks cut down all the trees—as a demonstration of what the county was proposing to do to the state park. The County Board not only voted against the plan, but became instrumental in having the state legislature develop an alternative to state-aid rules. This alternative allowed county's the ability to designate county roads as "natural preservation routes." Such routes had less stringent standards and allowed designers to be more flexible. Washington County designated this segment of CSAH 21 a Natural Preservation Route, one of 144 miles of such routes in the state's 30,000 mile state-aid system. The concern was that the community had effectively stopped this project before and was ready to stop the project again if the County failed to listen to the community.

# FUNDING

The project was funded by Washington County and Mn/DOT through County state-aid funds.

## **LESSONS LEARNED**

- Put those who oppose the project on the project advisory committee, listening to and acting on their concerns.
- Let neighbors define the issues, goals, and scope of the project.
- Let neighbors own the project by practicing flexibility.
- Let neighbors explain the benefits of the project to those that oppose the project.
- Let neighbors help focus the project on specific project needs (safety at Dodges Corner), not general issues (transportation creates sprawl).

#### KEY WORDS

Applicable Project Delivery Stages: Planning, Scoping, Design, Construction

Applicable Transportation Modes: Vehicular, Bicycle

Applicable Transportation Officials: Highway Engineers, Traffic Engineers, Structural Engineers, Landscape Architects, Geotechnical Engineers, Hydrological Engineers.

*Transportation Topics:* Visual Quality, Safety, Geometrics, Design Speed, Informed Consent, Shoulder Width.





# **CONTACTS** Chris Thornton, AICP

Design Coordinator
Engineering Department
Washington County Public Works Department
11660 Myeron Road North
Stillwater, MN 550982
651-430-4316
thornton@co.washington.mn.us

Nancy Daubenberger, P.E.
Consulting Project Engineer
Current address:
South Metro Area Engineer
Metro District
Mail Stop 610
1500 West County Road B2
Roseville, MN 55113
651-582-1000
nancy.daubenberger@dot.state.mn.us

Craig Churchward, ASLA
Consultant Project Manager
Current address:
Director, Context Sensitive Solutions and Transportation Enhancements
HNTB Great Lakes Division
7900 International Drive
Minneapolis, MN 55425
952-345-5981
cchurchward@hntb.com



